

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of the claims in the above-captioned patent application:

Listing of Claims:

- Claim 1. (Currently Amended) A coupler comprising:
- a saddle having a longitudinal axis extending along a first direction;
 - a channel extending from a first end to a second end along a second direction substantially perpendicular to the first direction, said first end having a substantially elliptical cross-section in the first direction connected to said saddle and said second end having a substantially circular cross-section in the first direction;
 - a tissue clamp positioned around said channel, said tissue clamp configured to elastically move from a clamped position substantially corresponding to a shape of said saddle to an unclamped position not corresponding to the shape of said saddle; and
 - a flange formed substantially at said second end of said channel.
- Claim 2. (Original) The coupler of claim 1, wherein said tissue clamp comprises a shape-memory alloy.
- Claim 3. (Original) The coupler of claim 2, wherein said shape-memory alloy comprises a nickel titanium alloy.
- Claim 4. (Original) The coupler of claim 1, wherein said tissue clamp comprises a plurality of teeth positioned along a periphery of said tissue clamp.
- Claim 5. (Original) The coupler of claim 1, wherein said tissue clamp comprises a plurality of dimpled holes formed therethrough.
- Claim 6. (Original) The coupler of claim 1, wherein a cross-sectional area of said channel remains substantially constant as said channel transitions from said first end to said second end.
- Claim 7. (Original) The coupler of claim 1, wherein a cross-sectional area of said channel increases or decreases as said channel transitions from said first end to said second end.

Claim 8. (Original) The coupler of claim 1, further comprising a mating surface formed adjacent to said flange.

Claim 9. (Original) The coupler of claim 1, wherein said tissue clamp comprises a pair of legs, which extend and position said tissue clamp adjacent to said saddle when said tissue clamp is heated to a transition temperature.

Claim 10. (Original) The coupler of claim 1, wherein said tissue clamp is made from a material having an austenitic transition temperature less than about 10°C.

Claim 11. (Original) The coupler of claim 1, wherein said tissue clamp is made from a material having an austenitic transition temperature about equal to or slightly greater than body temperature.

Claim 12. (Original) The coupler of claim 10, wherein said material is nitinol.

Claims 13-22. (Cancelled)

Claim 23. (Currently Amended) A conduit coupling device comprising:

a first coupler comprising a first saddle, a first channel, a first tissue clamp, and a first flange projecting from the first channel and surrounding the first channel adjacent to an end of the first channel opposite the first saddle, said first flange including a first mating surface;

a second coupler comprising a second saddle, a second channel, a second tissue clamp, and a second flange projecting from the second channel and surrounding the second channel adjacent to an end of the second channel opposite the second saddle, said second flange including a second mating surface;

a clamping ring for securing said first flange and said second flange together, wherein said first mating surface is configured to engage said second mating surface when said first flange and said second flange are secured together.

Claim 24. (Original) The conduit coupling device of claim 23, wherein said first channel and said second channel have substantially constant cross-sectional area.

Claim 25. (Original) The conduit coupling device of claim 23, wherein said first channel and said second channel have varying cross-sectional areas.

Claim 26. (Cancelled)

Claim 27. (Original) The conduit coupling device of claim 23, wherein said first tissue clamp and said second tissue clamp comprise a shape-memory alloy.

Claim 28. (Original) The conduit coupling device of claim 23, wherein each of said first tissue clamp and said second tissue clamp comprise a plurality of dimpled holes formed therethrough.

Claim 29. (Original) The conduit coupling device of claim 23, wherein said first tissue clamp and said second tissue clamp comprise a plurality of teeth positioned along a periphery of said first tissue clamp and said second tissue clamp.

Claim 30. (Original) The conduit coupling device of claim 23, wherein said first channel comprises a first end of substantially elliptical cross-section connected to said first saddle and a second end of substantially circular cross-section adjacent to said first flange.

Claim 31. (Original) The conduit coupling device of claim 23, wherein said second channel comprises a first end of substantially elliptical cross-section connected to said second saddle and a second end of substantially circular cross-section adjacent to said second flange.

Claim 32. (Original) The conduit coupling device of claim 23, wherein said first coupler may be positioned at varying positions relative to said second coupler, so that said first saddle and said second saddle may be positioned at varying positions relative to one another.

Claim 33. (Original) The conduit coupling device of claim 23, wherein said first channel comprises a first end of substantially circular cross-section connected to said first saddle and a second end of substantially circular cross-section adjacent to said first flange.

Claims 34-66. (Canceled)